

## PRODUCT DESCRIPTION

STARFIX PS GG 100 is a high performance, non-sag, chemical resistant elastomeric joint system. Due to its high polysulfide polymer content, it is resistant to many chemicals, shrinkage, aging, thermal stress and the effects of outdoor exposure. It consists of a 'base' compound and 'accelerator' (Curing Agent). When the two components are mixed together prior to application, a chemical reaction is initiated which cures instantly to a firm, flexible rubber like seal with excellent adhesion to concrete, masonry, wood, glass, acrylic and PVC plastics. It is capable of withstanding repeated extension, compression & cyclic movements without the loss of adhesion and resists deterioration by weathering, sunlight, ozone, water, salt, oils and fuels. It is far superior to all the conventional joint sealing material like bitumen, mastics, metallic channels and expansion sheets.

## BENIFITS

- Expansion Joints in Buildings, Concrete panels, Potable water retaining structure
- Accommodates continuous and pronounced cyclic movement ( $\pm 25\%$ )
- Adheres to most common substrates
- High resistance to ageing reduces physical damage due to climatic extremes
- Easy mixing and application
- Non-slumping - can be used in wide joints up to 40 mm wide.
- Safer nontoxic hardener.
- Cures at ambient temperatures to a tough, elastic and flexible rubber like material.
- Bonds strongly to most of the building materials with the use of recommended primers.
- Durable, remains unaffected by UV rays, ozone and weathering conditions
- It can be over coated by waterproofing compounds.

## USES

STARFIX PS GG 100 is suitable for use within the construction industry on all parts where above average repeated movement is encountered over a wide temperature range.

- Sealing of dynamic structural cracks
- Glazing joints of window, door frame and curtain walls.
- Joints & 'J' bolts of asbestos sheet roofing.
- Sealing of water retaining structure joints such as, water tank, reservoir, dams, aqua
- ducts, canals, culverts and water treatment plant.
- Sealing of joints in traffic areas such as, bridges, roads and car parking areas.
- Sealing of expansion, contraction & construction joints in building structures such as, basements, subways, retaining walls, floors, external walls and claddings of high-rise buildings, roof terraces & ceilings especially structural expansion joints running through the ceiling

## TECHNICAL DATA SHEET

<b>Form</b>	2 components, paste
<b>Color</b>	Grey
<b>Application life</b>	2 hours @ 25°C
<b>Initial cure</b>	24 hours @25°C
<b>Full cure</b>	7 days @ 25°C
<b>Application temperature</b>	5 - 50°C
<b>Density</b>	1.65 gm/cc
<b>Non volatile content</b>	> 97%
<b>Operating temperature</b>	-30 to + 100 °C
<b>Chemical resistance</b>	Resistance to most alkalies & dilute acids, petrol, diesel or jet fuel and many solvent and vegetable oils.
<b>Flammability</b>	Flame and Fuel resistant as per BS specification
<b>Service temperature</b>	-40°C to +80°C

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### METHOD OF APPLICATION

### SURFACE PREPARATION

1. Surface preparation is the most important step before application of sealant to get best results and to avoid failure.
2. The joint surface must be dry, free from dust, coatings, bituminous mastics, concrete curing agents, mold release agents, oils, greases and loose particles.
3. Clean the joint surface by wire brush and sanding with emery paper.
4. Remove dust by compressed air or paint brush.
5. Wipe out oil and grease by solvent soaked cloth (such as Xylene, Toluene or Acetone) BACK UP MATERIALS Insert compressible polyethylene, polyurethane, neoprene, polyethylene butyl rod as backup material to control depth of sealant in the joint and to provide support for tooling of the sealant.

### PRIMING

Select a primer suitable to the substrate and apply two coats by brush on the sides of the joints surface at an interval of 30 minutes.

### BOND BREAKER

Fix bond breaker tape such as self adhesive polyethylene tape on back-up material to avoid adhesion of sealant to the third surface.

### MASKING TAPE

Apply masking tape such as self-adhesive polyethylene, cellophane or cloth tape on both edges of the joint. It is used to improve the neatness of the finished seal by protecting the face edges of the joint. It may be removed immediately after tooling of the sealant.

### MIXING

The base and accelerator compounds are packed in pre-weighed quantity as per the mixing ratio. After the application of primer, mix the material of individual container. Transfer

entire quantity of accelerator to the base compound tin and mix it thoroughly to a uniform, homogenous black color. Mixing can be done manually with spatula, palette knife or special flat stirrer attached to a low speed electric mixer less than 500 r.p.m.

### APPLICATION

Apply the mixed gun grade compound by means of a spatula or by filling into a plastic cartridge which is then placed into the hand held caulking gun into the joint.

### TOOLING AND FINISHING

It is desirable that a smooth surface is obtained. Tool the sealant by pressing the puffy knife or flat tool against the sealant surface, moving along the length of the joint. Tooling breaks air bubbles and exposes any air pockets present. Tooling compresses the sealant, thus promoting adhesion to the joint sides. After tooling the masking tape should be removed immediately. Soap solution can be used to smoothen the sealant surface.

- Joint surface to be applied should be clean dry and free from loose material, dust oil or grease.
- Apply appropriate quantity of primer.
- Empty out the curing agent sachet in to the base in the can.
- Mix and use immediately one complete unit at a time.
- Use a slow speed drill machine / mixer fitted with a spiral stirrer and mix for 10 minutes.
- The product is ready to be used when you get a uniform smooth paste without any streak of grey or white colour.
- Install a backer rod in the joint to be applied with sealant. Pour or gun (with a conventional caulking gun) the mixed sealant in the prepared joint.
- Sealant will get leveled in the joint. Please refer detail Sealant Application Guideline.

### STANDARD SPECIFICATION:

**STARSEAL GG -100** Complies with requirement of. B.S 4254-1983.and IS – 12118.

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### COVERAGE

To estimate the no. of running meter work done in 1 kg of PS GG 100 required to seal the joint can be very easily estimated by using the following formula:-

$$\text{PS GG 100 L/KG} = \frac{650}{(W \times D)}$$

Where, L = Length of the joint in linear running Meter

W = Width of the joint in mm.

D = Depth of the joint in mm.

### SERVICE LIFE AND MAINTENANCE

**Anticipated life:** 20 years +

Correctly applied, the sealant should not require maintenance. However, sealant that has become damaged can be replaced by cutting out the affected area, cleaning & priming the joint surfaces and applying fresh sealant as in the original manufacturer's specification.

### HEALTH & SAFETY

The curing agent contains Manganese Dioxide. The base is labeled as "Irritant" and curing agent is labeled as "Harmful"

For further information please refer to MSDS or contact Technical Service Department

### SHELF LIFE & STORAGE

12 months unopened containers when kept in dry conditions at a temperature between 5°C to 30°C. Storage at cool dry place under shed away from heat.

### AVAILABLE PACKING

Available in 1kg, 4kg containers

### WARRANTY

The information given is based on our knowledge and performance of the material. Every precaution is taken in

the manufacture of the product and our responsibility is limited to the quality of supplies with no guarantee of the results in the field, as manufacturer has no control over site conditions or execution of work.

### DISCLAIMER

The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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